# STREPTOCOCCUS PNEUMONIAE, Drug –Resistant Invasive Disease

#### I. IDENTIFICATION

- A. CLINICAL DESCRIPTION: *Streptococcus pneumoniae* (pneumococci) causes many clinical syndromes, depending on the site of infection (e.g., acute otitis media, pneumonia, bacter emia, or meningitis). Pneumococci are a frequent cause of sinusitis and pneumonia.
- B. REPORTING CRITERIA: Laboratory diagnosis

#### C. LABORATORY CRITERIA FOR CONFIRMATION:

- Isolation of *S. pneumoniae* from a normally sterile site (e.g., blood, cerebrospinal fluid, or less commonly, joint, pleural, or pericardial fluid) **AND**
- "Nonsusceptible" isolate (i.e., intermediate- or high-level resistance of the *S. pneumoniae* isolate to at least one antimicrobial agent currently approved for use in treating pneumococcal infection as defined by the National Committee for Clinical Laboratory Standards).
- D. KENTUCKY CASE DEFINITION: A clinically compatible case that is laboratory confirmed.

## II. ACTIONS REQUIRED/PREVENTION MEASURES

A. KENTUCKY DISEASE SURVEILLANCE REQUIRES ROUTINE NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT within 5 business days of the identification of a case or suspected case.

# B. EPIDEMIOLOGY REPORTS REQUIRED:

- 1. Kentucky Reportable Disease Report Form EPID 200 (Rev. Jan/03).
- 2. Invasive *Streptococcus pneumoniae* Surveillance Report

# C. PREVENTION MEASURES:

- All children aged 23 months should be vaccinated with Pneumococcal Conjugate Vaccine-7, by receiving three doses at intervals of approximately 2 months. Children who begin the series at 6 months will receive a fourth dose at 12 -15 months.
- Administer the 23-valent pneumococcal vaccine to high-risk patients.

# C. PUBLICHEALTHINTERVENTIONS:

• Ensure that appropriate isolation precautions are being taken at the facility in which the patient is hospitalized.

## III. CONTACTS FOR CONSULTATION

- A. KENTUCKY DEPARTMENT FOR PUBLIC HEALTH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
- B. KENTUCKY DEPARTMENT FOR PUBLIC HEALTH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
- C. KENTUCKY DEPARTMENT FOR PUBLIC HEALTH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

## IV. RELATED REFERENCES

- 1. Chin, James, ed. Pneumococcal pneumonia. In: Control of Communicable Diseases Manual. 17<sup>th</sup> ed. Washington, DC: American Public Health Association, 2000: 387-390.
- 2. Preventing Pneumococcal Disease Among Infants and Young Children: Recommendation s of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000; 49(No.RR-9): 21-29.
- 3. Pickering, LK, ed. Pneumococcal Infections. In: 2000 Red Book: Report of the Committee on Infectious Diseases. 25<sup>th</sup> ed. Elk Grove Village, IL: 452-460.
- 4. National Committee for Clinical Laboratory Standards. Performance standards for antimicrobial susceptibility testing. Villanova, PA: National Committee for Clinical Laboratory Standards, 1994;14(16).